Application No.: 09/910,093 Attorney Docket No.: 2001-0226

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: : Confirmation No.: 2374

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Mehryar MOHRI : Attorney Ref.: 2001-0226

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Serial No.: 09/910,093 : Art Unit: 2654

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Filed: July 20, 2001 : Examiner: AZAD, ABUL K

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FOR: A SYSTEM AND METHOD OF EPSILON REMOVAL OF WEIGHTED AUTOMATA

AND TRANSDUCERS

The Commissioner for Patents P.O. Box 1450 Alexandria, VA 22313-1450

## INFORMATION DISCLOSURE STATEMENT

Pursuant to 37 C.F.R. §1.56, the attention of the Patent and Trademark Office is hereby directed to the references listed on the attached PTO/SB/08A. Unless otherwise indicated herein, one copy of each reference that is not a US Patent reference is attached. It is respectfully requested that the information be expressly considered during the prosecution of this application, and that the references be made of record therein and appear among the "References Cited" on any patent to issue therefrom. In accordance with 37 C.F.R. §1.97(h), the filing of this Information Disclosure Statement shall not be construed to be an admission that the information cited in the statement is, or is not considered to be, material to patentability as defined in §1.56(b).

- 1. This information disclosure statement is being filed within three months of the filing date of a national application other than a continued prosecution application under §1.53(d); within three months of the date of the entry of the national stage as set forth in §1.491 in an international application; before the mailing of a first Office action on the merits; or before the mailing of a first Office action after the filing of a request for continued examination under §1.114. No certification or fee is required. (37 C.F.R. §1.97(b)). If a first office action was mailed before the filing of this IDS, please debit deposit account 502960 the necessary fees set forth in 37 C.F.R. §1.17(p) to proceed to consider the cited references.
- 2. This information disclosure statement is being filed more than three months after the filing date of a national application other than a continued prosecution application under §1.53(d); more than three months after the date of the entry of the national stage as set forth in §1.491 in an international application; after the mailing date of a first Office action on the merits, or after the mailing of a first Office action after the filing of a request for continued examination under §1.114, but before the mailing date of any of a Final action under §1.113, a Notice of Allowance under §1.311 or an action that otherwise closes prosecution in the application. (37 C.F.R. §1.97(c)).
  - a. I hereby certify that each item of information contained in this information disclosure statement was first cited in any communication from a foreign patent

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Correspondence Address: Thomas A. Restaino Reg. No. 33,444 AT&T Corp. Room 2A-207		staino 14	Thomas M. Isaacson Attorney for Applicants Reg. No. 44,166 Phone: 410-286-9405 Fax No.: 410-510-1433
		y 20, 2007	Ву:
			Respectfully submitted,
	4. Oth	er Comments:	
		c. Please debit Deposit Accourtover the fee under 37 C.F.R. §1.17 information.	nt No. in the amount of to (p) and ensure consideration of the disclosed
		disclosure statement was cited in a c a counterpart foreign application or inquiry, was known to any individ	of information contained in this information ommunication from a foreign patent office in to my knowledge after making reasonable that designated in §1.56(c) more than three information disclosure statement. (37 C.F.R.
		disclosure statement was first cited	n of information contained in this information in any communication from a foreign patent ration not more than three months prior to the statement. (37 C.F.R. §1.97(e)(1)).
	Final a	action under §1.113, a Notice of A	being filed after the mailing date of any of a llowance under §1.311, or an action which cours first, but on or before payment of the
		to cover the fee under 37 C.F.R. disclosed information. If necessary,	ng paid by Credit Card, for payment of \$180 §1.17(p) and to ensure consideration of the the Commissioner for Patents is authorized to <b>Thomas M. Isaacson, LLC, Account No. 50</b> -ent in order to process this IDS
		disclosure statement was cited in a calculation and a counterpart foreign application and inquiry, no item of information control was known to any individual designation.	of information contained in this information communication from a foreign patent office in d to my knowledge after making reasonable ained in the information disclosure statement ated in §1.56(c) more than three months prior osure statement. (37 C.F.R. §1.97 (e)(2)).
		filing of this information disclosure s	statement. (37 C.F.R. §1.97 (e)(1)).

## PATENT APPLICATION

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				Application Number	09/910,093		
INFORMATION DISCLOSURE STATEMENT BY APPLICANT			LOSURE	Filing Date	July 20, 2001		
			PLICANT	First Named Inventor	Mehryar MOHRI		
				Group Art Unit	2654		
(use a	(use as many sheets as necessary)		Examiner Name	AZAD, ABUL K			
Sheet	1	of	2	Attorney Docket Number	2001-0226		

	Cite No.1	U.S. Patent Doc	ument	U.S. PATENT DOCUMENTS  Name of Patentee or Applicant of Cited Document	Date of Publication of	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
Examiner Initials*		Number	Kind Code <sup>2</sup> (if known)		Cited Document MM-DD-YYYY	
	1	5,806,032		Sproat, Richard William	09-1998	
	2	6,499,132		Morley et al	12-2002	
	3	6,760,636		Kempe, Andre	07-2004	
	4	5,095,432		Reed, Jonathan H.	03-1992	
	5	6,574,597		Mohri et al	06-2003	
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\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. \*Unique citation designation number. \*See attached Kinds of U.S. Patent Documents \*Enter Office that issued the document, by the two letter code (WIPO Standard ST.3). \*For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Skind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. \*Applicant is to place a check mark here if English language Translation is attached.

## PATENT APPLICATION

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PTO/SB/08A MODIFIEI Substitute for form 1449A/PTO Complete if Known 09/910,093 **Application Number** INFORMATION DISCLOSURE Filing Date July 20, 2001 First Named Inventor Mehryar MOHRI STATEMENT BY APPLICANT **Group Art Unit** 2654 (use as many sheets as necessary) **Examiner Name** AZAD, ABUL K

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS

2001-0226

Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial,

symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published

Mohri, "Generic Epsilon-Removal Algorithm for Weighted Automata" In Sheng Yu and Andrei Paun, ed., 5th

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	1	International Conference, CIAA 2000, v.2088 of Lecture Notes in Computer Science, Springer-Verlag, 2001.	
	2	Weng, F.L., Stolcke, A., and Sankar, A. (1998). Efficient Lattice Representation and Generation. In the Proceedings of International Conference on Spoken Language Processing, Sydney, Australia, Nov. 30 – Dec. 4, 1998.	
	3	Mehryar Mohri et al; A Rational Design for a Weighted Finite-State Transducer Library. Proceedings of the Second International Workshop on Implementing Automata (WIA'97) volume 1436 of Lecture Notes in Computer Science, pages 144-158, September 1998	
	4	Van Noord, Gertjan; "Treatment of Epsilon Moves in Subset Construction;" Computational Linguistics, Volume 26, Number 1, Pages 61-76, March 2000.	
	5		
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Examiner Signature		Date Considered	

<sup>\*</sup>EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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